

Product datasheet for SC120727

Citrate transport protein (SLC25A1) (NM_005984) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Citrate transport protein (SLC25A1) (NM_005984) Human Untagged Clone
Tag:	Tag Free
Symbol:	Citrate transport protein
Synonyms:	CMS23; CTP; D2L2AD; SEA; SLC20A3
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC120727 sequence for NM_005984 edited (data generated by NextGen Sequencing)

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ATGCCCGCGCCCCGCGCCCCGCGCGCTCTGGCGGCCCGCGCCCCGCGTCCGGGAAGGCC
AAGCTGACGCACCCGGGAAGGCGATCCTGGCAGGCGGCCTGGCGGGTGGCATCGAGATC
TGCATCACCTTCCCCACCGAGTACGTGAAGACGCAGCTGCAGCTGGACGAGCGCTCGCAC
CCGCCGCGGTACCGGGGCATCGGGGACTGCGTGCGGCAGACGGTTCGAGCCATGGCGTC
CTGGGCCTGTACCGCGCCTTAGCTCCCTGCTCTACGTTCCATCCCCAAGGCGGCCGTC
AGGTTTGGAAATGTTGAGTTCCTCAGCAACCACATGCGGGATGCCAGGGACGGCTGGAC
AGCACGCGTGGGCTGCTGTGCGGCCTGGGCGTGGCGTGCCGAGGCCGTGGTGGTCGTG
TGCCCCATGGAGACCATCAAGGTGAAGTTCATCCAGACCAGACCTCCCCAAACCCCAAG
TACAGAGGATTCTCCACGGGGTTAGGGAGATTGTGCGGGAACAAGGGCTGAAGGGGACG
TACCAGGGCCTCACAGCCACTGTCTGAAGCAGGGCTCGAACCAGGCCATCCGCTTCTTC
GTCATGACCTCCCTGCGCAACTGGTACCGAGGGGACAACCCCAACAAGCCCATGAACCT
CTGATCACTGGGGTCTTCGGAGCTATTGCAGGCGCAGCCAGTGTCTTTGGAAACTCTCT
CTGGATGTGATTAAGACCCGGATGCAGGGCCTGGAGGCGCACAAATACCGGAACACGTGG
GACTGCGGCTTGAGATCCTGAAGAAGGAGGGGCTCAAGGCATTCTACAAGGGCACTGTC
CCCCGCTGGGCCGGTCTGCCTGGATGTGGCCATAGTGTGTCATCTATGATGAAGTG
GTGAAGCTGCTCAACAAAGTGTGGAAGACGGACTAA

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Clone variation with respect to NM_005984.2



[View online »](#)

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_005984 unedited
 NGGTGCACATTTTGTAAATACGACTCACTTATAGGGCGGCCGGAATTCGCACGAGGCTGG
 AGTCTCGGACCCGAACCGCCACAGGCGCCCCGCTCCCGCCGCCATGCCCGCGCCCCG
 GCCCGCGCGCTCTGGCGGCCGCGCGCCCGCTCCGGGAAGGCCAAGCTGACGCACCCG
 GGAAGGCGATCCTGGCAGGCGGCTGGCGGTGGCATCGAGATCTGCATCACCTTCCCC
 ACCGAGTACGTGAAGACGCAGCTGCAGCTGGACGAGCGCTCGACCCCGCGCGTACCCG
 GGATCGGGGACTGCGTGCAGCAGCGTTTCGACGCCATGGCGTCTGGGCTGTACCCG
 GGCTTAGCTCCCTGCTCTACGGTTCCATCCCCAAGGCGCCGTCAGTTTGGAATGTTT
 GAGTTCCTCAGCAACCACATGCGGGATGCCAGGACGGCTGGACAGCACGCGTGGGCTG
 CTGTGCGGCTGGGCGTGGCGTGGCCAGGCCGTGGTGGTCTGTGCCCATGGAGACC
 ATCAAGGTGAAGTTCATCCACGACCAGACTCCCCAAACCCCAAGTACAGAGGATTCTTC
 CACGGGTTAGGAGATTGTGCGGAACAAGGGCTGAAGGGGACGTACCAGGGCCTCACA
 GCCACTGTCTGAAGCAGGGCTCGAACCAGGCCATCCGCTTCTTCGTATGACCTCCCTG
 CGCAACTGGTACCGAGGGGACAACCCCAACAAGCCATGAACCTCTGATCACTGGGGTC
 TTCGAGCTATTGCAGGCGCAGCCAGTGTCTTTGGAACACTCCTCTGGATGTGATTAAGA
 CCCGNATGCANGGCCCTGGAGCGCANCAATACCGNACACGTGGGAACTGCGCTTCAGA
 TCCTGAAGAAGGAGGGCTCAAGCATTCTACAGGGCACTG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_005984 unedited
 NTTTTCGTCTGCACCCGCGCCCAATCTAGGATCGAGTTTTTTTTTTTTTTTTTTTGGCA
 ACAGGATCCGGTTTATTCTGCTTGGCAGGGTGGTCTGAGAGTGGTGGTGCCACCCTG
 TCCGGGGCGGAGAGAGGGCCCGAGGGCCAGTTAAGGCCAATGGCGGGAGAAGCAGGGGGC
 TGCAGCCCTGGAATGCGGTGAAGCCAGGCCGAGGCCGAGGCCGAGGCTGTGGTAGGCCAG
 GGCAGGGTGAAGGCACCGGACTGGGACCGGGCCAGGGCTACAGGGCCGAGGACCCAGGC
 CACACGGGCACCCCGGGAGGGCGGGCACAGGGTACGTGACACAGAACATGAAACACAGG
 CACAGGGTCATAGGCCAGATGCACATCCAGCCATGGCTGGGCCAGACTGGGACACAGT
 GGTGGTGTACACACAGACCACAGGGGGACACATGGATTTGACAGCCACAATGCACAGA
 CCAGGCTACAGAGCTCGAGGGACGTGGGAAGGGGCCTTCTGGCACTACTGCACTGGAATC
 GTGAGACAAAGGTAGCAGGACACTCTGGCGGTGCCTGGGGCGGCCCTTGCGGGCTCTC
 TGGCTTAGTCCCTCCACACTTTGTTGAGCAGCTTCACCACTTCATCATAGATGACAA
 ACACTATTGCCACATCCACGCCAGACCCGGGCCAGGCCGCGGGGACAGTGGCCCTTGT
 AAAATCCTTTGACCCCTCCTTTTTTAGGGATCTGAAGCCGAGTCCACAGTGGTCCGTC
 TTTTGTGCGCCTCCAGCCCTGCATTCCGGTCTAATCACATCCAGAAGAATGTTCCAAA
 AACCTGCCTGGCCTGGAAAACCTCCAAAACCCAGGACCAAGGTTTCATGCCTTTGTGGT
 TGCCA

Restriction Sites:

NotI-NotI

ACCN:

NM_005984

Insert Size:

1460 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_005984.1](#), [NP_005975.1](#)

RefSeq Size: 1619 bp

RefSeq ORF: 936 bp

Locus ID: 6576

UniProt ID: [P53007](#)

Cytogenetics: 22q11.21

Domains: mito_carr

Protein Families: Druggable Genome

Gene Summary: This gene encodes a member of the mitochondrial carrier subfamily of solute carrier proteins. Members of this family include nuclear-encoded transporters that translocate small metabolites across the mitochondrial membrane. This protein regulates the movement of citrate across the inner membranes of the mitochondria. Mutations in this gene have been associated with combined D-2- and L-2-hydroxyglutaric aciduria. Pseudogenes of this gene have been identified on chromosomes 7, 11, 16, and 19. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2013]
Transcript Variant: This variant (1) encodes the shorter isoform (a, also known as mCiC).